



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/456,652	12/08/1999	ERIC ANDREW BEARD	LE9-99-111	6735

21972 7590 10/16/2006

LEXMARK INTERNATIONAL, INC.
INTELLECTUAL PROPERTY LAW DEPARTMENT
740 WEST NEW CIRCLE ROAD
BLDG. 082-1
LEXINGTON, KY 40550-0999

EXAMINER

ROBINSON, MYLES D

ART UNIT	PAPER NUMBER
----------	--------------

2625

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/456,652	Applicant(s) BEARD ET AL.	
	Examiner Myles D. Robinson	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 08 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/13/2006 has been entered.

Response to Amendment

2. Applicant's amendment was received on 7/13/2006, and has been entered and made of record. Currently, **claims 1 – 41** are pending.

Response to Arguments

3. Applicant's arguments with respect to **claims 1 – 41** have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. The following quotation of 37 CFR 1.75(a) is the basis of the objection:

- (a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

5. **Claim 11 – 15, 17 – 22 and 33 – 35** are objected to under 37 CFR 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

Claims 11 – 13 and 33 – 35 recite the limitation “a device” in line 2 of each respective claim after the limitation “two or more devices” was claimed in line 1 of their respective parent claims 10 and 32. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to ***the same, instant*** “device” or ***a unique and distinctly different*** “device” within these claims. All claims dependent upon these claims suffer the same deficiencies and, therefore, are objected to as well.

Claim 17 recites the limitation “a printer” in line 3 of the claim after the limitation “a printer” was claimed in line 2 of the claim. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to ***the same, instant*** “printer” or ***a unique and distinctly different*** “printer” within the claim. All claims dependent upon this claim suffer the same deficiency and, therefore, are objected to as well.

Claim 19 recites the limitation “a transmitting device” in line 2 of the claim after the limitation “a transmitting device” was claimed in line 4 of the parent claim 16. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to ***the same, instant*** “transmitting device” or ***a unique and distinctly***

Art Unit: 2625

different “transmitting device” within the claim. All claims dependent upon this claim suffer the same deficiency and, therefore, are objected to as well.

Claims 17, 19, 21 and 22 recite the limitation “a metavariable” in line 1 (claim 17), lines 1 and 2 (claim 19) and line 2 (claims 21 and 22) after the limitation “a metavariable” was claimed in line 4 of the parent claim 16. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to **the same, instant** “metavariable” or **a unique and distinctly different** “metavariable” within these claims. All claims dependent upon these claims suffer the same deficiencies and, therefore, are objected to as well.

Claims 18 and 20 recite the limitation “a receiving device” in line 2 of each respective claim after the limitation “a receiving device” was claimed in line 8 of the parent claim 16. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to **the same, instant** “receiving device” or **a unique and distinctly different** “receiving” within these claims.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 10 – 15 and 32 – 41** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "directly or indirectly" in **claim 38** is a relative term which renders the claim indefinite. The term "directly or indirectly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claims 10 and 32 provide for the use of metavariable, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process Applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 10 and 32 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

All claims dependent upon these claims suffer the same deficiencies and, therefore, are rejected as well.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. ***Claims 10 – 15 and 32 – 37*** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 10 and 32 are drawn to non-functional descriptive material. MPEP 2016.IV.B.1(a) (Nonfunctional Descriptive Material) states:

"Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. 101."

"Where certain types of descriptive material, such as music, art, photographs and mere arrangements or compilations of facts or data, are merely stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing process performed by the computer, then such descriptive material alone does not impart functionality either to the data as so structured, or to the computer."

"For example, music is commonly sold to consumers in the form of a compact disc. In such cases, the know compact disc acts as nothing more than a carrier for nonfunctional descriptive material. The purely nonfunctional descriptive material cannot alone provide the practical application for the manufacture."

MPEP 2106.IV.B.1 (Nonstatutory Subject Matter) states:

"When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement."

Claims 10 and 32 currently recite "a metavariable". There is no functional relationship imparted by this data to a computing device. Therefore, the claim is drawn to non-functional descriptive material which is non-statutory per se.

Furthermore, MPEP 2106.IV.B.2(a) (Statutory Product Claims) states:

"A claim limited to a ... manufacture, which has a practical application in the technological arts, is statutory."

Art Unit: 2625

In order for a claimed invention to accomplish a practical application, it must produce a “useful, concrete and tangible result” State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02 (see MPEP 2106.II.A). Currently, the claim does not recite a practical application. In order for the claimed product to produce a “useful, concrete and tangible result”, recitation of one or more of the following elements is suggested:

- The manipulation of data that represents a physical object or activity transformed from outside the computer (MPEP 2106.IV.B2(b)(i)).
- A physical transformation outside the computer, for example in the form of pre or post computer processing activity (MPEP 2106.IV.B2(b)(i)).
- A direct recitation of a practical application in the technological arts (MPEP 2106.IV.B2(b)(ii)).

All claims dependent upon these claims suffer the same deficiencies and, therefore, are rejected as well.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. **Claims 1 – 8, 10 – 16, 19 – 30 and 32 – 41** are rejected under 35 U.S.C. 102(a) and 102(e) as being anticipated by **Cooper et al.** (U.S. Patent No. 6,295,538).

Referring to **claim 23**, Cooper discloses a system for providing a communication interface between a plurality of devices (*see devices of Fig. 1 interconnected via network 102 [column 2, lines 43 – 49 and column 3, lines 5 – 18]*), said system comprising:

a transmitting device (*see Fig. 1, clients 108, 110, 112 [column 2, line 61 – column 3, line 4]*) having a first data store (*column 3, lines 2 – 4*), said transmitting device having two or more parameters associated therewith (*see Fig. 5, metadata producer 508 in conjunction with application layer 502, system object/libraries 504 application programming interface layer 506 to generate metadata stream 510 to send to either output device 516 or network server 514 via a network wherein various attributes and primitive calls of the application, i.e. word processing program, spreadsheet application, etc., are used to create the metadata [column 6, line 63 – column 7, line 41]*) and *Fig. 6 [column 7, lines 45 – 53]*,

at least one receiving device (*see Fig. 1, printers 114, 116 and storage 106 [column 2, line 61 – column 3, line 4]*) having a second data store (*column 1, lines 31 – 38 suggests printers 114, 116 comprise memory units*), said receiving device having two or more parameters associated therewith (*column 6, lines 33 – 39 wherein data size is associated with the memory capacity of the output device and column 5, lines 31 – 38 wherein the output device dynamically adjusts its parameters to the optimal format*),

wherein said transmitting device transmits a data stream (*column 1, lines 14 – 23 and column 2, line 61 – column 3, line 4*) from said first data store to said second data store of said receiving device, said data stream including at least one metavariable (*column 1, lines 14 – 23 and column 2, line 61 – column 3, line 4 wherein metadata is analogous to metavariable*), said metavariable being indicative of the two or more parameters of either said transmitting device or said receiving device (*see Fig. 4 wherein device hints, i.e. parameters of metadata, include fonts, colors, data size, etc [column 5, line 7 – column 6, line 62]*),

wherein at least one of the parameters defines one or more rendering characteristics to be applied to a print job (*see Fig. 4 wherein device hints, i.e. parameters of metadata, include fonts, colors, data size, etc, determine the rendering environment of a print job [column 5, line 7 – column 6, line 62]*), and wherein the metavariable is treated as a single variable containing data cumulative of variables of each parameter (*see Figs. 9A and 9B wherein metadata is defined as “data about data” [column 1, lines 14 – 23]*).

Referring to **claims 24 and 27**, Cooper discloses the system further wherein said metavariable is data indicative of two or more configurations and settings of the transmitting device (*see Fig. 5, metadata producer 508 in conjunction with application layer 502, system object/libraries 504 application programming interface layer 506 to generate metadata stream 510 to send to either output device 516 or network server 514 via a network wherein various attributes and primitive calls of the application, i.e.*

word processing program, spreadsheet application, etc., are used to create the metadata [column 6, line 63 – column 7, line 41] and Fig. 6 [column 7, lines 45 – 53].

Referring to **claims 25 and 28**, Cooper discloses the system further wherein said metavariable is data indicative of two or more configurations and application settings of the receiving device (*column 6, lines 33 – 39 wherein data size is associated with the memory capacity of the output device and column 5, lines 31 – 38 wherein the output device dynamically adjusts its parameters to the optimal format*).

Referring to **claims 26 and 30**, Cooper discloses the system further wherein said metavariable is a command from a transmitting host computer (*see Fig. 1, clients 108, 110, 112 [column 2, line 61 – column 3, line 4]*) to a receiving printer (*see Fig. 1, printers 114, 116 [column 2, line 61 – column 3, line 4]*) altering two or more configurations and application settings of the receiving device upon receipt of said metavariable by the receiving device (*see Figs. 9A and 9B wherein device hints are updated [column 8, line 59 – column 9, line 44]*).

Referring to **claim 29**, Cooper discloses the system further wherein one of said transmitting device and said receiving device is a host computer (*see Fig. 1, clients 108, 110, 112 [column 2, line 61 – column 3, line 4]*), and the other said transmitting device and said receiving device is a printer (*see Fig. 1, printers 114, 116 [column 2, line 61 – column 3, line 4]*).

Referring to **claims 1 – 6**, the rationale provided in the rejection of claims 23 – 28, respectively, are incorporated herein. In addition, the systems of claims 23 – 28 include the limitations and elements of the interfaces of claims 1 – 6, respectively.

Referring to **claim 7**, Cooper discloses the interface further wherein said interface (see *devices of Fig. 1 interconnected via network 102 [column 2, lines 43 – 49 and column 3, lines 5 – 18]*) is between one or more computers (see *Fig. 1, clients 108, 110, 112 [column 2, line 61 – column 3, line 4]*) and one or more printers (see *Fig. 1, printers 114, 116 [column 2, line 61 – column 3, line 4]*), each computer and each printer having a data store (*column 3, lines 2 – 4 wherein each computer comprises a data store and column 1, lines 31 – 38 suggests printers 114, 116 comprise memory units*).

Referring to **claim 8**, the rationale provided in the rejection of claim 4 is incorporated herein. In addition, the interface of claim 4 includes the limitations and elements of the interface of claim 8.

Referring to **claims 10 and 32**, the rationale provided in the rejection of claim 23 is incorporated herein. In addition, the system of claim 23 includes the limitations and elements of the metavariables of claims 10 and 32.

Referring to **claims 11 and 33**, the rationale provided in both rejections of claims 24 and 25 are incorporated herein. In addition, both systems of claims 24 and 25 include the limitations and elements of the metavariables of claim 11 and 33.

Referring to **claims 12, 15, 34 and 37**, the rationale provided in the rejection of claim 26 is incorporated herein. In addition, the system of claim 26 includes the limitations and elements of the metavariables of claims 12, 15, 34 and 37.

Referring to **claims 13 and 35**, the rationale provided in both rejections of claims 27 and 28 are incorporated herein. In addition, both systems of claims 27 and 28 include the limitations and elements of the metavariables of claims 13 and 35.

Referring to **claims 14 and 36**, the rationale provided in the rejection of claim 25 is incorporated herein. In addition, the system of claim 25 includes the limitations and elements of the metavariables of claims 14 and 36.

Referring to **claims 16, 21 and 22**, the rationale provided in the rejections of claims 23, 26 and 24, respectively, are incorporated herein. In addition, the systems of claims 23, 26 and 24 perform the methods of claims 16, 21 and 22, respectively.

Referring to **claims 32, 34 and 22**, the rationale provided in the rejections of claims 23, 26 and 24, respectively, are incorporated herein. In addition, the systems of claims 23, 26 and 24 perform the methods of claims 16, 21 and 22, respectively.

Referring to **claims 19 and 20**, the rationale provided in the rejection of claim 29 is incorporated herein. In addition, the system of claim 29 performs the methods of claims 19 and 20.

Referring to **claim 38**, the rationale provided in the rejection of claim 23 is incorporated herein. In addition, the system of claim 23 includes the limitations and elements of the interface of claim 38.

Referring to **claim 39**, the rationale provided in the rejections of claims 24 and 25 are incorporated herein. In addition, the systems of claim 24 and 25 include the limitations and elements of the interface of claim 39.

Referring to **claim 40**, the rationale provided in the rejections of claims 27 and 28 are incorporated herein. In addition, the systems of claim 27 and 28 include the limitations and elements of the interface of claim 40.

Referring to **claim 41**, the rationale provided in the rejection of claim 26 is incorporated herein. In addition, the system of claim 26 includes the limitations and elements of the interface of claim 41.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claim 9, 17, 18 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of **Cooper et al.** (U.S. Patent No. 6,295,538).

Referring to **claim 31**, admission discloses the system further wherein said data indicative of the printer settings, said data transmitter by a transmitting printer to one or more receiving host computers (*see Specification [page 2, lines 6 – 10]*).

Admission does not explicitly disclose the system further wherein said data is a metavariable.

Cooper discloses the system further wherein said data is a metavariable (*see Figs. 9A and 9B wherein metadata is defined as "data about data" [column 1, lines 14 –*

Art Unit: 2625

23]), said metavariab le is data indicative of printer settings (*see Fig. 4 wherein device hints, i.e. parameters of metadata, include fonts, colors, data size, etc [column 5, line 7 – column 6, line 62]*).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to include data as a metavariab le, or metadata, that indicate printer settings, i.e. device hints. The suggestion/motivation for doing so would have been to optimize code path and device resources, as suggested by Cooper (*column 5, lines 7 – 16*).

Referring to **claims 9, 17 and 18**, the rationale provided in the rejection of claim 31 is incorporated herein. In addition, the system of claim 31 includes the limitations and elements of claim 9 and performs the methods of claims 17 and 18.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571) 272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

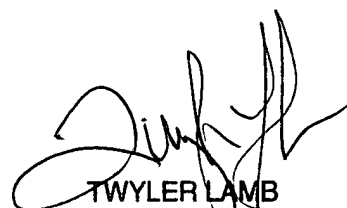
Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MDR

10/4/06

TWYLER LAMB
SUPERVISORY PATENT EXAMINER